STATE OF CALIFORNIA California Energy Commission

Minutes of the July 28, 2010, Energy Commission Business Meeting.

The meeting was called to order at 10:06 by Chairman Karen Douglas. The Pledge of Allegiance was lead by Chairman Douglas.

Present: Karen Douglas, Chairman James D. Boyd, Vice Chair Jeffrey D. Byron, Commissioner Robert B. Weisenmiller, Commissioner Anthony Eggert, Commissioner

Six Energy Commission employees received Superior Accomplishment or Sustained Superior Accomplishment Awards that were presented by Executive Director Melissa Jones. The honorees were Bill Pennington and Angela Gould of the Efficiency and Renewable Energy Division, and Carolyn Cass, Doris Yamamoto, Anish Gautam and Pedro Gomez of the Energy Research and Development Division.

- 1. CONSENT CALENDAR. (Items on the Consent Calendar will be taken up and voted on as a group. A commissioner may request that an item be moved and discussed later in the meeting.)
 - a. AMERICAN COUNCIL FOR AN ENERGY EFFICIENT ECONOMY. Possible approval of Contract 500-10-016 for \$30,000 with the American Council for an Energy Efficient Economy to co-sponsor two conferences that provide an opportunity to showcase the Public Interest Energy Research Program's successful emerging technologies and energy efficiency research and to facilitate their commercialization and marketability. (PIER electricity funding.) Contact: Dustin Davis.
 - b. PERRY SMITH, LLP. Possible approval of Amendment 1 to Contract 150-09-004 with Perry Smith, LLP, to add conflict of interest terms and conditions to the original agreement. Contact: Mark Hutchison.

Commissioner Byron moved and Vice Chair Boyd seconded approval of the Consent Calendar. The vote was unanimous. (5-0)

2. INLAND EMPIRE ENERGY CENTER (01-AFC-17C). Possible approval of a petition to amend the California Energy Commission decision for the Inland Empire Energy Center to adjust the air quality conditions of certification to be consistent with the South Coast Air Quality Management District RECLAIM/Title V permit for the project. Contact: Dale Rundquist. (10 minutes)

Item 2 was removed from the agenda and will be heard at a future Business Meeting.

3. TURBO AIR, INC. DECERTIFICATION. Possible adoption of the proposed Order and Decision of the Efficiency Committee recommending that two models of Turbo Air, Inc., commercial refrigerators be removed from the Energy Commission's appliance database. Interested parties may participate, but any submissions are limited to the existing evidentiary record (California Code of Regulations, Title 20, section 1236(b).) Contact: Pippin Brehler. (15 minutes)

Commissioner Eggert moved and Commissioner Byron seconded adoption of the proposed Order and Decision, with direction to staff to work with the manufacturer to minimize the impact of the decision. The vote was unanimous. (5-0)

4. STATE ENERGY EFFICIENT APPLIANCE REBATE PROGRAM (CASH FOR APPLIANCES). Possible adoption of revised guidelines for the Cash for Appliances Program to expand the rebate program by offering new appliance categories with the goal of distributing available stimulus funds. Revisions would extend rebates to dishwashers, freezers, central air conditioners and heat pumps, furnaces, and solar water heating systems. Revisions would also add rules for verifying the proper installation, disposal, and recycling of central heating, ventilating and air conditioning (HVAC) systems and solar water heating systems that are required under the current Guidelines for white good appliances. Contact: Lorraine White. (10 minutes)

Commissioner Eggert moved and Vice Chair Boyd seconded adoption of the revised guidelines with errata. The vote was unanimous. (5-0)

5. STATE ENERGY PROGRAM: Possible adoption of resolution to cancel Program Opportunity Notice (PON) No. 400-09-401 (Municipal Financing Program), and Notice of Proposed Awards, in response to direction of the United States Department of Energy (DOE). DOE directed the states to consider financing options in addition to Property Assessed Clean Energy (PACE) financing. The DOE issued this direction in response to regulatory uncertainty created by recent determinations by the Federal Housing Finance Agency (FHFA) affecting PACE financing. Staff recommends cancellation of PON 09-401 because the 400-09-401 solicitation only allowed for financing through first-priority liens, such as PACE, which FHFA has opined violates the Fannie May and Freddie Mac Uniform Security Instrument prohibitions against senior liens. Contact: Claudia Chandler. (10 minutes)

Commissioner Eggert moved and Commissioner Byron seconded adoption of the resolution. The vote was unanimous. (5-0)

6. POWER SOURCE DISCLOSURE PROGRAM - ORDER INSTITUTING RULEMAKING. Possible approval of an Order Instituting Rulemaking to modify existing regulations to govern the requirements of the Power Source Disclosure Program. The new regulations will allow for necessary formatting changes to clarify the Power Content Labels that retail sellers of electricity are required to disclose to their customers under the California Public Utilities Code sections 398.2-398.5, enacted by Assembly Bill 162 (Ruskin, Chapter 313, Statutes of 2009). Contact: Lorraine Gonzalez. (5 minutes)

Vice Chair Boyd moved and Commissioner Weisenmiller seconded approval of the Order Instituting Rulemaking. The vote was unanimous. (5-0)

7. RENEWABLES PORTFOLIO STANDARD 2006 PROCUREMENT VERIFICATION REPORT. Possible approval of the *Renewables Portfolio Standard (RPS) 2006 Procurement Verification Report.* This report transmits the RPS procurement verification findings for 2001-2006 to the California Public Utilities Commission. Contact: Gina Barkalow. (10 minutes)

Vice Chair Boyd moved and Commissioner Weisenmiller seconded approval of the report. The vote was unanimous. (5-0)

8. CLIPPERCREEK, INC. Possible approval of Agreement ARV-10-001 for a grant of \$1.9 million to ClipperCreek, Inc. to update approximately 3,000 existing California electric vehicle charging stations to the new SAE-J1772. In addition, ClipperCreek will refurbish inductive and paddle infrastructure that will remain on site where they are being used by current electric vehicles. ClipperCreek will install meters on the charging infrastructure, as directed by the local utility, to allow monitoring and utility control. (ARFVTF funding.) Contact: Jennifer Allen. (5 minutes)

Vice Chair Boyd moved and Commissioner Eggert seconded approval of Agreement ARV-10-001. The vote was unanimous. (5-0)

9. ALTEX TECHNOLOGIES CORPORATION. Possible approval of Grant Agreement PIR-09-016, awarding \$1,435,693 to Altex Technologies Corporation to develop a waste vegetable oil-driven combined heat and power system for fast food restaurants. (PIER electricity funding.) Contact: Jean Baronas. (5 minutes)

Commissioner Byron moved and Vice Chair Boyd seconded approval of Agreement PIR-09-016. The vote was unanimous. (5-0)

10. POTTER DRILLING, INC. Possible approval of Agreement PIR-09-019 for a cost-share grant of \$380,000 to Potter Drilling, Inc. to develop and test a non-contact geothermal well drilling technology. Potter Drilling received a DOE ARRA grant under FOA-0000075 for this project. (PIER electricity funding.) Contact: John Hingtgen. (5 minutes)

Commissioner Eggert moved and Commissioner Byron seconded approval of Agreement PIR-09-019. The vote was unanimous. (5-0)

11. ELECTRIC POWER RESEARCH INSTITUTE, INC. Possible approval of Agreement PIR-10-022 for a grant of \$400,000 to Electric Power Research Institute, Inc., (EPRI) to demonstrate the effectiveness of airflow management in data centers to reduce air conditioning costs. The project is estimated to reduce data center electricity consumption by 15 percent annually. (PIER electricity funding.) Contact: Anish Gautam. (5 minutes)

Commissioner Byron moved and Vice Chair Boyd seconded approval of Agreement PIR-10-022. The vote was unanimous. (5-0)

12. TRUSTEES OF THE CALIFORNIA STATE UNIVERSITY. Possible approval of eight grant applications, totaling \$617,245, from the Public Interest Energy Research (PIER) program's Energy Innovations Small Grant's Solicitation 09-01. (PIER electricity funding.) Contact: Matt Coldwell. (10 minutes)

Vice Chair Boyd moved and Commissioner Byron seconded approval of the eight grant applications. The vote was unanimous. (5-0)

a. 09-01-27, Robert A. Hogue, Menlo Park, CA, Low Cost Energy Storage for Solar Thermal Power Plants, \$42,245. This project will model the feasibility of using the ground underneath solar collectors as an energy storage medium, which would replace conventionally used thermal storage.

- b. 09-01-51, University of California, Davis, Light-assisted Biomass Fuel Cell, \$95,000. This project will test the feasibility of a light-assisted biofuel cell that converts chemical energy stored in biomass from municipal waste water into usable electricity.
- c. 09-01-30, Lightwave Photonics, Inc., Encinitas, CA, Growth of Cavity Light Emitting Diode on a Reflective Substrate, \$95,000. This project will test the feasibility of removing a conventional secondary processing step in LED manufacturing, by bonding a highly reflective surface into the LED to increase light extraction and electrical efficiency, while reducing manufacturing costs.
- d. 09-01-19, Semprius, Inc., Durham, NC, Concentrated Photovoltaic Module with Low-Cost Thermal Management, \$95,000. This project will to test the feasibility of eliminating the need for conventional thermal management in concentrated photovoltaic applications by using the solar interconnects between cells for heat-transfer.
- e. 09-01-73, Wind Harvest International, Davis, CA, Modeling of Straight Bladed Vertical-Axis Wind Turbines, \$50,000. This project's objective is to improve the design of the company's currently marketed vertical-axis wind turbine by modeling the performance of tightly spaced turbines and establishing the proper blade angles and connecting structures.
- f. 09-01-28, San Jose State University, San Jose, CA, Modeling of Wind Power Generation on High-Rise Buildings, \$50,000. This project's objective is to model and test the feasibility of developing a system of wind deflectors and wind fences to control the turbulent air flow on top of urban high-rise buildings and evaluate the use of wind deflectors and wind fences for the reduction of turbine noise and improving public safety.
- g. 09-01-66, Thermofluidics, United Kingdom, Solar Heat Engine Driven Hydraulic Ram for Low-Cost Irrigation, \$95,000. This project will test the feasibility of a pollution free and sustainable method for pumping irrigation water without electricity by developing a solar heat engine-driven hydraulic ram.
- h. 09-01-49, Paula Moon & Associates, Naperville, IL, Co-Production of Electrical Power and Lithium from Geothermal Fluids, \$95,000. This project will test the feasibility of a process to extract lithium from geothermal fluids. If successful, this project could help geothermal energy become more cost-competitive with other energy sources, and lower the cost of lithium for battery applications.
- 13. CALIFORNIA CERTIFIED ENERGY RATING AND TESTING SERVICES (CalCERTS). Possible approval of CalCERTS as a Home Energy Rating System (HERS) provider for HERS Raters conducting California Whole-House Home Energy Ratings and California Home Energy Audits, and CalRatePro as HERS Rating Software. Contact: Jim Holland. (5 minutes)

Commissioner Weisenmiller moved ad Commissioner Byron seconded approval of CalCERTS as a HERS provider. The vote was unanimous. (5-0)

14. **Minutes:** July 14, 2010, Business Meeting Minutes.

Commissioner Byron moved approval of the July 14 Minutes with one correction: the vote on Item 2, should read '(4-0)' rather than '(5-0)'. Commissioner Weisenmiller seconded. The vote was 4-0-1. Vice Chair Boyd abstained.

15. Commission Committee Presentations and Discussion:

Vice Chair Boyd reported on the recent Plug-In 2010 Conference.

- 16. **Chief Counsel's Report:** None.
- 17. **Executive Director's Report:** None.
- 18. **Public Adviser's Report:** None.
- 19. **Public Comment:** None.
- 20. **Internal Organization and Policy.** No discussion.

Appearances.

Ms. Charmaine Yu, Coblentz, Patch, Duffy & Bass for TurboAir

Mr. Nick Gillespie, Whirlpool (by telephone)

Mr. Peter Ucovich, Sacramento County, California First

Mr. Manuel Alvarez, Southern California Edison

Mr. John Haig, Sonoma County

Ms. Liz Yager, Sonoma County

Mr. Nehemiah Stone, Benningfield Group

Mr. Tim Tutt, Sacramento Municipal Utilities District

Mr. Ian McGowen, 3 Degrees (by telephone)

Ms. Jennifer Martin, Center for Resource Solutions (by telephone)

Ms. Laura Genao, Southern California Edison

Mr. Michael Bachand, CalCERTS, Inc.

There being no further business, the meeting was adjourned at 1:55 p.m.

Respectfully submitted,

HARRIET KALLEMEYN Secretary to the Commission